

EXHIBIT E

Exhibit E

U.S. Patent 8,392,311

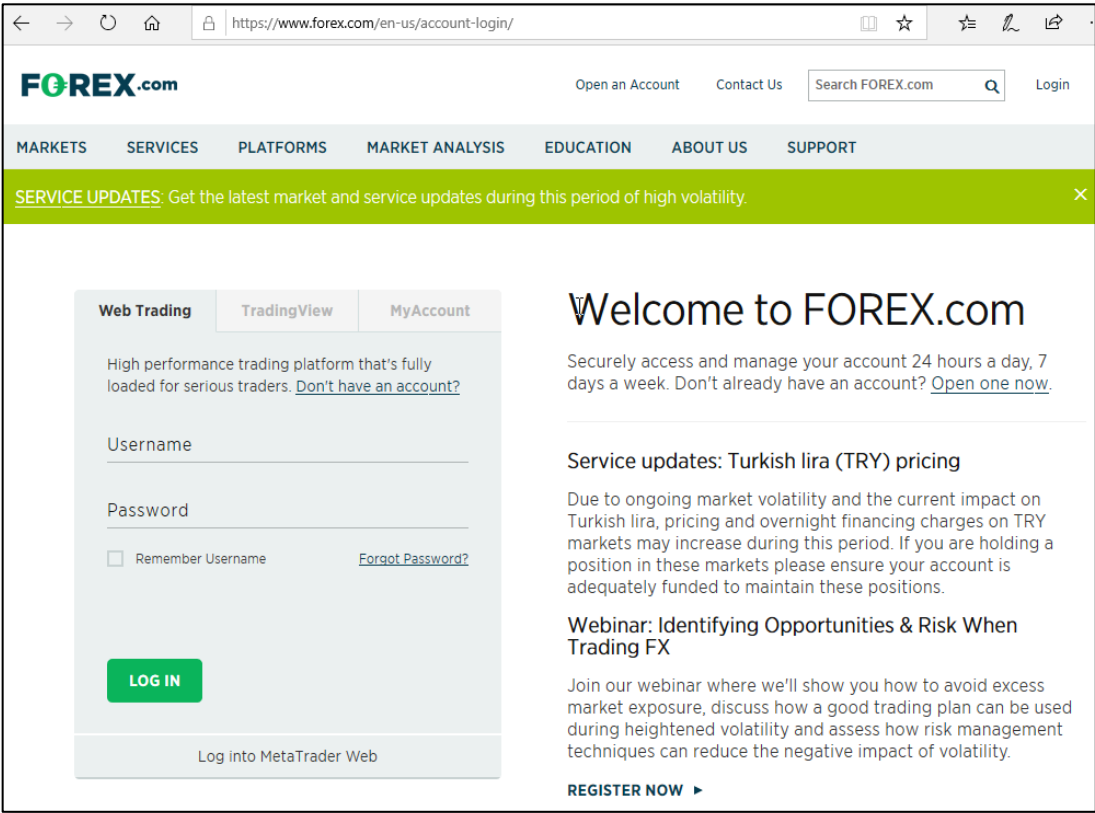
Claim Language	Gain Systems
Claim 1	
<p>1. A method of trading currencies over a computer network connecting a trading system server and at least one trading client system, comprising the steps of:</p>	<p>Defendants' currency trading systems practice this claim. See Forex.com:</p> 

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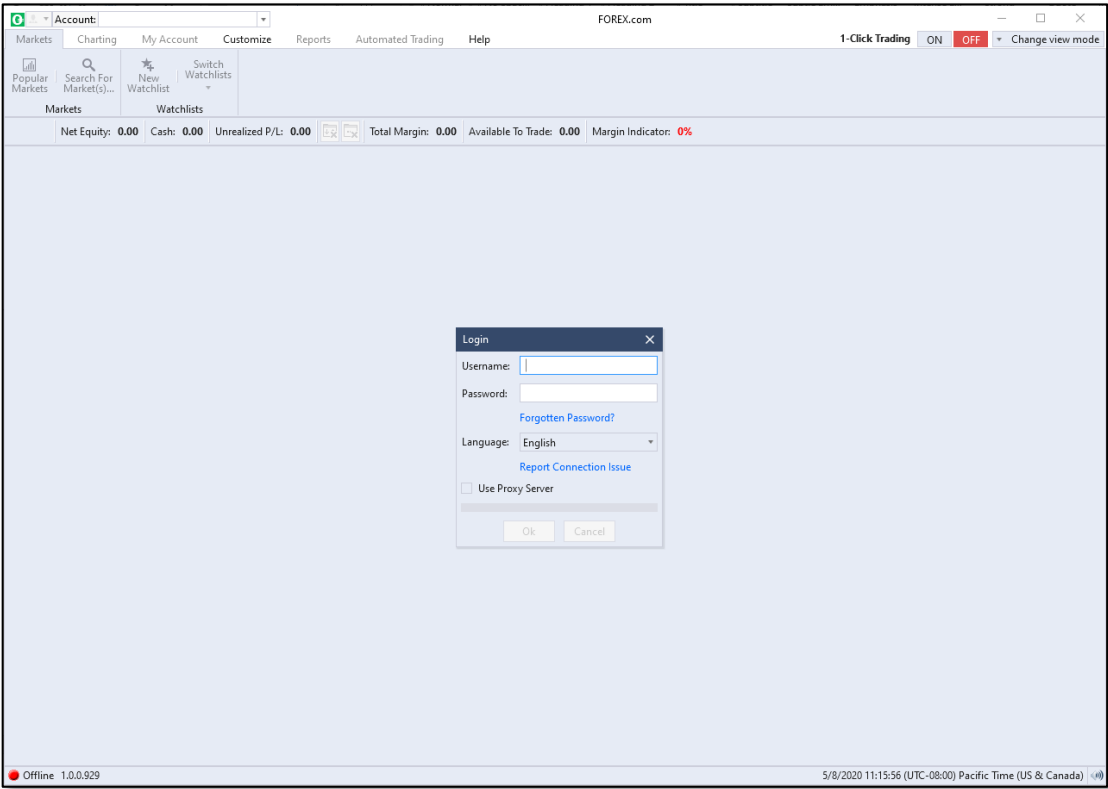


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(i) at the trading system server, determining and dynamically maintaining a plurality of current exchange rates, each current exchange rate relating to a pair of currencies and including a first price to buy a first currency of the pair with respect to a second currency of the pair and a second price to sell the first currency of the pair with respect to the second currency of the pair;

See:

The screenshot shows the FOREX.com interface. At the top, there's a header with account information: 233.46 Available to Trade, 233.46 Net Equity, 233.46 Cash (USD), 0.00 Unrealised P&L (USD), 0.00 Total Margin, and > 200% Margin Indicator. Below this is a navigation bar with links like 'Browse Markets', 'Default Worksp...', 'Market Analysis', and several 'New workspace' buttons. The main content area is titled 'Popular' and 'POPULAR USA'. It features a table of currency pairs with columns for 'Filter markets', 'SELL', 'BUY', 'CHANGE', '%CHANGE', and a directional arrow. The table lists various pairs including AUD/USD, EUR/JPY, EUR/USD, GBP/JPY, GBP/USD, NZD/USD, USD/CAD, USD/CHF, USD/JPY, XAG/USD (per 0.1), and XAU/USD.

Filter markets	SELL	BUY	CHANGE	%CHANGE	
AUD/USD	0.64235	0.64257	-6.40000	-0.10	+
EUR/JPY	114.568	114.589	-92.600	-0.80	+
EUR/USD	1.08045	1.08061	-35.00000	-0.32	+
GBP/JPY	131.051	131.086	-147.700	-1.11	+
GBP/USD	1.23598	1.23618	-74.70000	-0.60	+
NZD/USD	0.60267	0.60304	-22.70000	-0.38	+
USD/CAD	1.41363	1.41389	88.00000	0.63	+
USD/CHF	0.97455	0.97481	20.50000	0.21	+
USD/JPY	106.032	106.048	-53.600	-0.50	+
XAG/USD (per 0.1)	14.901	14.950	-0.920	-0.61	+
XAU/USD	1,686.13	1,687.14	-19.42	-1.14	+

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Watchlist: Popular Markets										
Search For Market(s)...		Watchlist: Popular Markets								
×	Market	Bid (Sell)	Ask (Buy)	Spread	% Change	☆	i	📊	Trade Size	Order
×	AUD/USD	0.64155 ▲	0.64176 ▲	2.1	-0.22%	☆	i	📊	2,000	Order
×	EUR/JPY	114.596 ▲	114.612 ▼	1.6	-0.78%	☆	i	📊	3,000	Order
×	EUR/USD	1.08036 ▼	1.08050 ▼	1.4	-0.33%	☆	i	📊	2,000	Order
×	GBP/JPY	130.975 ▲	131.011 ▲	3.6	-1.17%	☆	i	📊	1,000	Order
×	GBP/USD	1.23488 ▲	1.23508 ▲	2.0	-0.69%	☆	i	📊	1,000	Order
×	NZD/USD	0.60176 ▼	0.60209 ▼	3.3	-0.53%	☆	i	📊	1,000	Order
×	USD/CAD	1.41388 ▼	1.41410 ▲	2.2	0.64%	☆	i	📊	10,000	Order
×	USD/CHF	0.97449 ▼	0.97471 ▼	2.2	0.20%	☆	i	📊	2,000	Order
×	USD/JPY	106.066 ▼	106.078 ▼	1.2	-0.47%	☆	i	📊	5,000	Order
×	XAG/USD (per 0.1)	14.944 ▲	14.985 ▼	4.1	-0.35%	☆	i	📊	5	Order
×	XAU/USD	1,689.10 ▲	1,690.27 ▼	117	-0.96%	☆	i	📊	1	Order

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(ii) transmitting data from the trading system server to a trading client system, the transmitted data representing at least one current exchange rate at the time of the transmission;

See:



Oanda Corp. v. GAIN Capital Holdings, Inc.;
GAIN Capital Group, LLC.

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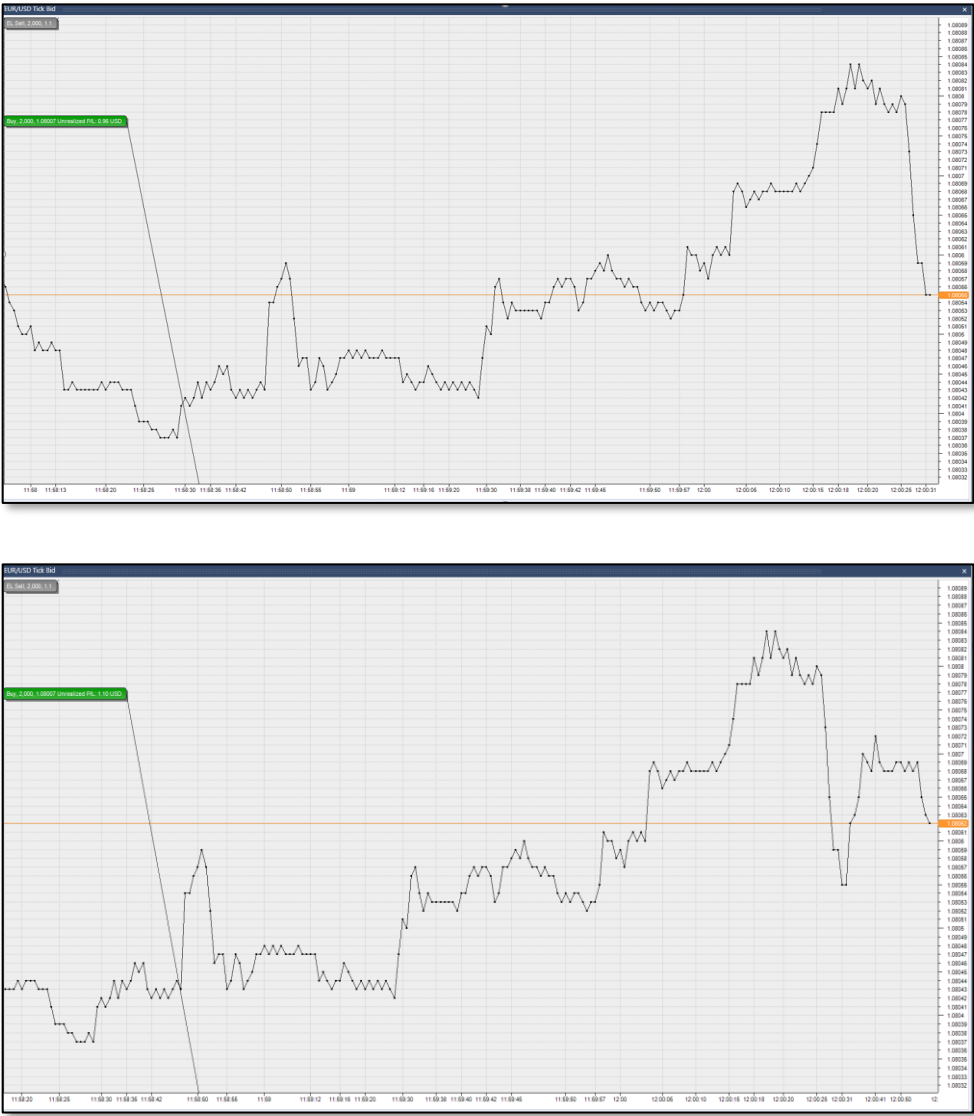


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(iii) at the trading client system, displaying the first and second prices for each received current exchange rate to a user;

See Claim 1(ii).

(iv) at the trading client system, accepting input from the user identifying a pair of currencies the user desires to trade, an amount of at least one currency of the pair desired to be traded and a requested trade price at which it is desired to effect the trade;

See:

TRADE ORDER SET ALERT

EUR/USD

SELL 1.08019 BUY 1.08035

1.6

Order price 1.10000

Quantity 2,000

Good 'til canceled (GTC)

☐ Stop 2,000 price pips \$ P/L GTC

☐ Limit 2,000 price pips \$ P/L GTC

« Standard ticket

Add OCO »

Place Order

Exhibit E

Create Entry Order

EUR/USD

1.08442 ▼ 1.08459 ▼

Order Type: Entry ▼

Direction: Buy ▼

Price: <= 1.08434 >= 1.08467

Quantity: >= 1,000 <= 5,000,001

Good Till: Cancelled ▼

Stops/Limits Remove All

Stop/Limit

☐ Stop ☐ Limit

☐ Trailing

☒ Price: <= 1.08434 >= 1.0845

☐ PIPs:

☐ Estimated P/L:

Quantity:

Good Till: Cancelled ▼

Ttl Qty: 0 Ttl Qty: 0

Submit Cancel

Exhibit E

(v) transmitting the accepted input from the trading client system to the trading system server;

See:

Positions (2)		Orders (1)		Price Alerts					
MARKET		ORDER	ORDER PRICE	CURRENT PRICE	DISTANCE AWAY	L		XLXS	
AUD/USD		Buy	2,000	0.70000	0.65423	0.04577		Delete	

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(vi) at the trading system server, comparing the requested trade price to the respective first price or second price of the corresponding current exchange rate at that time and, if the respective first price or second price of the corresponding current exchange rate at that time is equal to or better than the requested trade price, effecting the trade at the corresponding respective current exchange rate first price or second price and if the corresponding current exchange rate is worse than the requested trade price, refusing the trade; and

TRADE ORDER SET ALERT

✓ Trade Executed

EUR/USD

SELL 1.08002 BUY 1.08017

1.5

Quantity 2,000

☐ Associated Stop price pips \$ P/L

☐ Associated Limit price pips \$ P/L

Advanced ticket >>

✓ Trade Executed

EUR/USD

Opened: Buy 2000 at 1.08007

OK

Exhibit E

TRADE ORDER SET ALERT X

EUR/USD

SELL 1.08001 BUY 1.08017 ^

1.6

Quantity 2,000

☒ Associated Stop ☐ Associated Limit

1.10 -198.8 \$ 79.52

Too high. Maximum price 1.07993

price pips \$ P/L

Associated Quantity: 4,000

Advanced ticket >>

Stop level too high

2020-05-06 12:02:30 PM	Italy's daily coronavirus death toll and new cases' tally both rise	
2020-05-06 12:02:23 PM	*TOP NEWS*-Central Banks & Global Economy	
2020-05-06 12:02:21 PM	*TOP NEWS*-Global Markets	
2020-05-06 12:00:32 PM	*TOP NEWS*-World News	
2020-05-06 11:58:18 AM	REFILE-UPDATE 2-Sterling hits 12-day low versus dollar	
2020-05-06 11:57:47 AM	UPDATE 1-Natixis swings to a loss, hikes provisions on coronavirus, frauds	
2020-05-06 11:55:51 AM	BUZZ-COMMENT-Yen gains counter upbeat risk, AUD/USD rally struggles	
2020-05-06 11:55:43 AM	WRAPUP 2-U.S. private payrolls dive by a record 20.2 million	

News Economic Calendar

New trade: Market AUD/USD, BUY, 0.64149, Quantity 2,000, Order ID [REDACTED]

Exhibit E

Create Market Order

AUD/USD

0.64113 ▼ 0.64128 ▼

Order Type: Market ▼

Direction: Buy ▼

Price: 0.64128

Quantity: 2,000 ▼ ≥ 1,000 ≤ 5,000,001

Stops/Limits - Associated

Stop/Limit ⚠

☒ Stop ☐ Limit

☐ Trailing

Price: 0.70000 ▼ ≤ 0.64103 ≥ 0.64123

PIPs: 386.2 ▼

Estimated P/L: 234.48 ▼

Quantity: 4,000 ▼

Good Till: Cancelled ▼

Ttl Qty: 4,000 Ttl Qty: 0

Margin Calculator

Submit Cancel

(vii) transmitting from the trading system server to the trading client system an indication of whether the trade was refused or transacted and, if transacted, an indication of the price the trade was transacted at.

See above claim elements.

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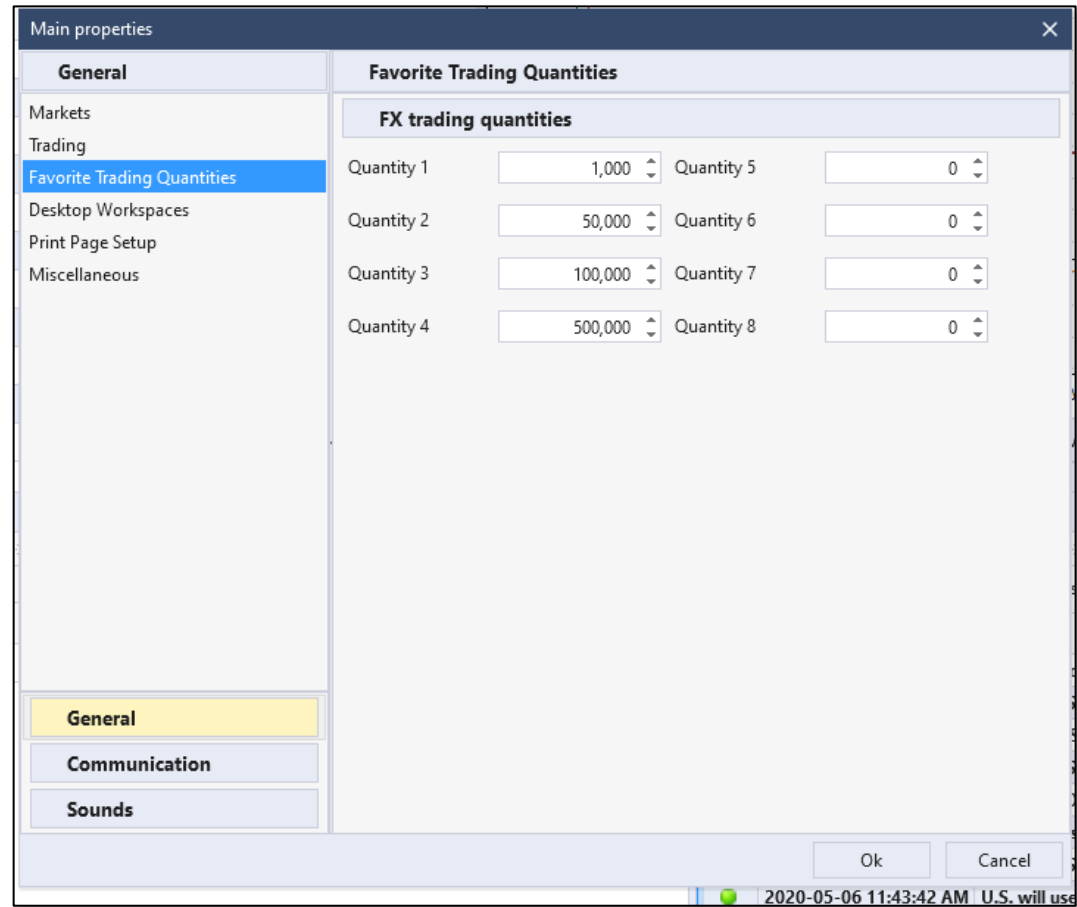
Claim 2

2. The method of claim 1 wherein the requested trade price is derived from a respective one of the first price or second price of the received current exchange rate and a user input limit value defining a maximum acceptable difference between the respective one of the first price or second price of the received current exchange rate received at the trading client system and the respective one of the first price or second price of the corresponding current exchange rate determined at the trading client system at which the trade can be effected.

See Claim 1. *See also:*

The screenshot displays a trading application interface for the AUD/USD pair. At the top, there are market data points: 115.595, 44.700, and 0.3. Below this, the 'ORDER' tab is active, showing 'SELL' at 0.65347 and 'BUY' at 0.65364, with a spread of 1.7. The 'Order price' field is set to 0.75 and the 'Quantity' is 100,000. The order type is set to 'Good 'til canceled (GTC)'. There are checkboxes for 'Stop' and 'Limit' orders, each with fields for price, pips, and P/L. At the bottom, there are links for 'Advanced ticket' and 'Add OCO', and a large green 'Place Order' button.

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See also: <https://www.forex.com/en-us/education/education-themes/forex-platform-tutorials/us-advanced-trading-platform-customization/> (accessed May 8, 2020)

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Claim 3	
<p>3. The method of claim 2 wherein the user can input a first limit value to define a maximum acceptable difference between the first price of the current exchange rate received at the trading client system and the first price of the corresponding current exchange rate determined at the trading client system and can input a second limit value to define a maximum acceptable difference between the second price of the current exchange rate received at the trading system and the second price of the corresponding current exchange rate determined at the trading client system and the requested trade price is derived from the first price or second price of the current exchange rate received at the trading client system and the corresponding one of the first limit value and second limit value.</p>	See Claim 2.
Claim 4	
<p>4. The method of claim 2 wherein step (iv) comprises the steps of:</p>	See Claim 2.
<p>(a) the user selecting one of the first price and second price of the current</p>	See Claim 2.

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exchange rate displayed at the trading client system;

(b) displaying to the user a set of input fields to define a desired trade, the input fields including an identification of the pair of currencies the user desires to trade, the amount of the currencies desired to be traded, the selected first price or second price of the current exchange rate received at the trading client system and a limit value, and where the input fields to identify the pair of currencies and the first price or second price are populated with appropriate values determined from the user's selection of the one of the first price or second price;

See:

The screenshot shows a trading interface for the EUR/JPY currency pair. At the top, there are tabs for 'TRADE', 'ORDER', and 'SET ALERT'. The 'TRADE' tab is active. Below the tabs, the currency pair 'EUR/JPY' is displayed. The interface shows a 'SELL' price of 115.593 and a 'BUY' price of 115.611, with a spread of 1.8. A 'Quantity' input field is set to 1,000. There are checkboxes for 'Associated Stop' and 'Associated Limit', each with a dropdown menu for 'price', 'pips', '\$', and 'P/L'. An 'Advanced ticket' link is visible. At the bottom, the PIP Value is USD 0.09, the Margin required is -43.38 USD, and the Percentage of available funds is 0.1%. A red 'Place Trade' button is at the bottom.

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TRADE ORDER SET ALERT

AUD/USD

SELL 0.65347 BUY 0.65364

1.7

Order price 0.75

Quantity 100,000

Good 'til canceled (GTC) ▾

☐ Stop ▾ price pips \$ P/L

☐ Limit price pips \$ P/L

Advanced ticket >>

Add OCO >>

Place Order

(c) receiving from the user input to the input field defining the desired amount of currency to be traded; and

See above. See also:

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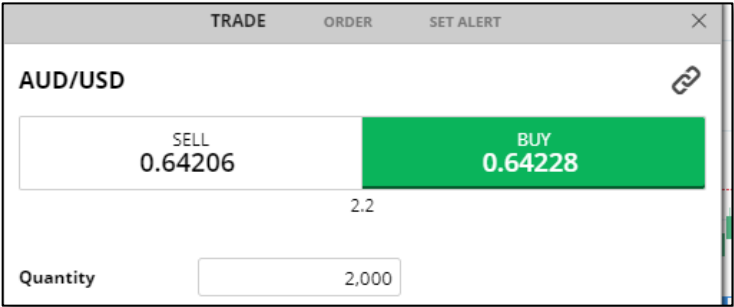
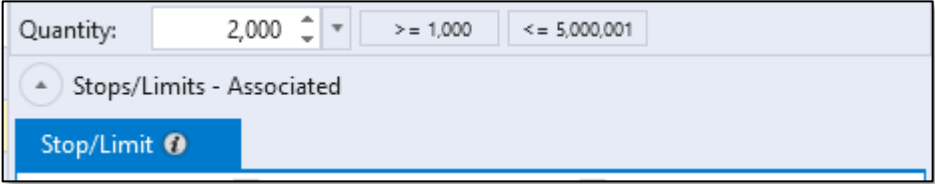
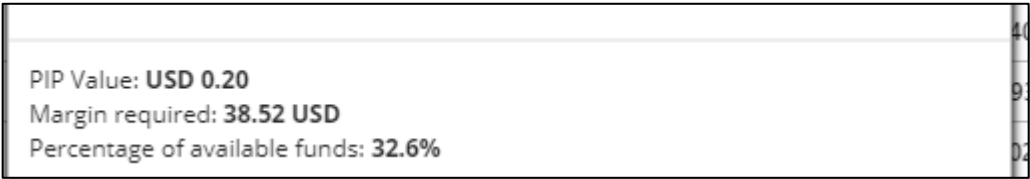
	 
(d) determining the requested trade price from the selected one of the first price and second price and the limit value.	<p>See above. See also:</p> 
Claim 5	
5. The method of claim 4 wherein in step (b) the displayed set of input fields includes: a first limit value to define a maximum acceptable difference between the first price of the current exchange rate received at the trading client system and the first price of the	<p>See above. See also:</p>

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corresponding current exchange rate determined at the trading client system; and a second limit value to define a maximum acceptable difference between the second price of the current exchange rate received at the trading system and the second price of the corresponding current exchange rate determined at the trading client system and in step (d) the requested trade price is derived from the selected first price or second price and the corresponding one of the first limit value and second limit value.

TRADE ORDER SET ALERT

EUR/JPY

SELL 115.602 BUY 115.618

1.6 1.6

These orders are linked. When one is executed the other will be cancelled.

Order price

Quantity 1,000

Good 'til canceled (GTC) ▼

☐ Stop ▼ 1,000 price pips \$ P/L GTC ▼

☐ Limit 1,000 price pips \$ P/L GTC ▼

Standard ticket

Remove OCO

Enter a price

PIP Value: USD 0.20
Margin required: 38.52 USD
Percentage of available funds: 32.6%

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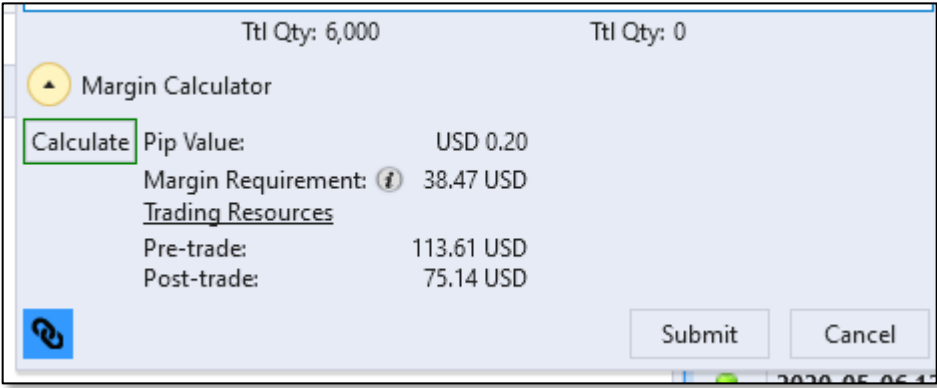
	
Claim 6	
6. The method of claim 2 wherein, when the limit value is zero, the requested trade price is the current corresponding first price or second price of the current exchange rate at the trading server.	<i>See generally</i> , Claim 1.
Claim 7	
7. A method of trading currencies over a computer network connecting a trading system server and at least one trading client system, comprising the steps of:	<i>See</i> Claim 1.
(i) at the trading system server, determining and dynamically maintaining a plurality of current exchange rates, each current exchange rate relating to a	<i>See</i> Claim 1(i).

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pair of currencies and including a first price to buy a first currency of the pair with respect to a second currency of the pair and a second price to sell the first currency of the pair with respect to the second currency of the pair;	
(ii) transmitting data from the trading system server to a trading client system, the transmitted data representing at least one current exchange rate at the time of the transmission;	See Claim 1(ii).
(iii) receiving at the trading system server input from a user of the trading client system identifying a pair of currencies the user desires to trade, an amount of at least one currency of the pair desired to be traded and a requested trade price at which it is desired to effect the trade;	See Claim 1(iii-iv). <i>See also:</i>

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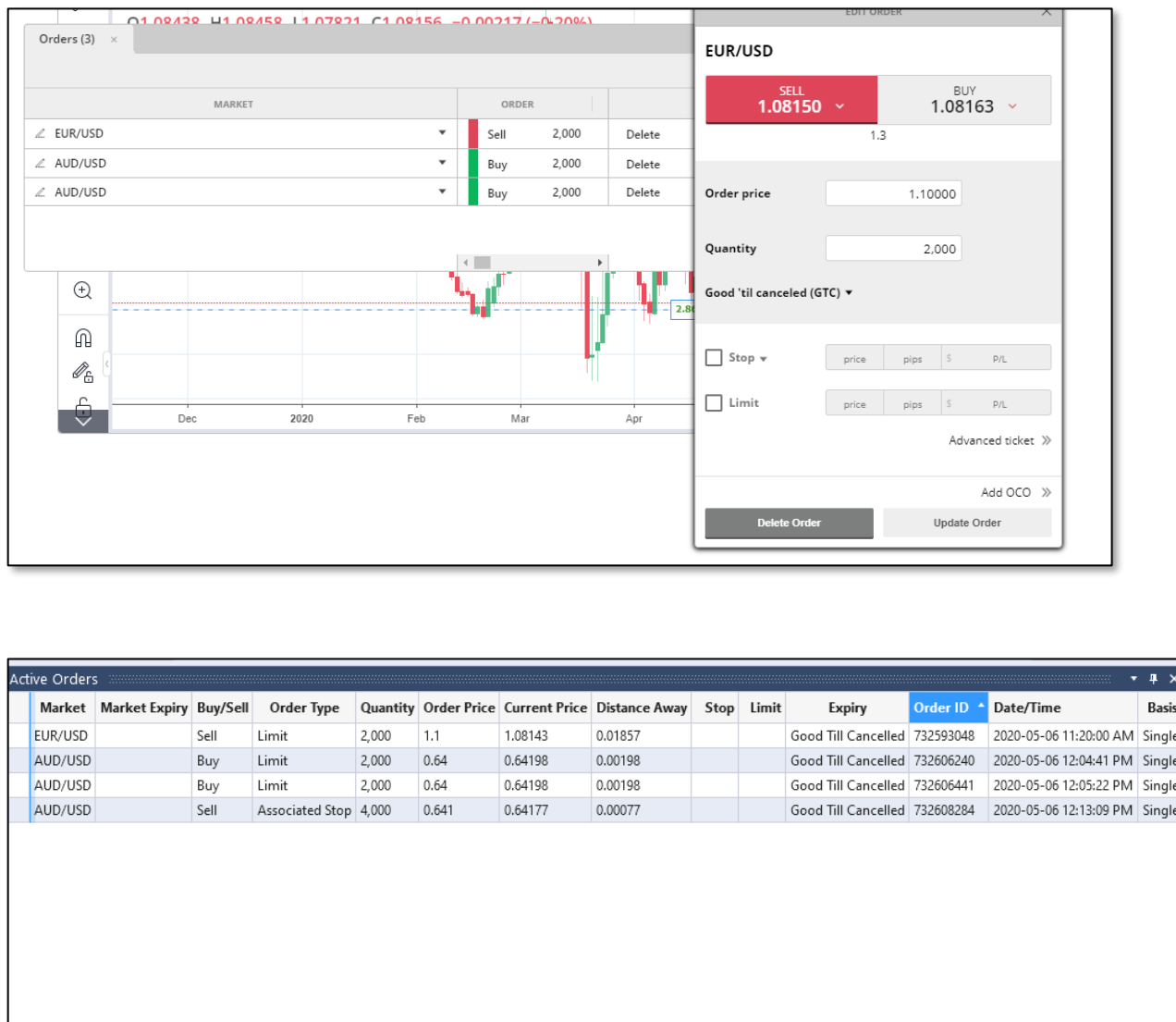


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(iv) at the trading system server, comparing the requested trade price to the respective first price or second price of the corresponding current exchange rate at that time and, if the respective first price or second price of the corresponding current exchange rate at that time is equal to or better than the requested trade price, effecting the trade at the corresponding respective current exchange rate first price or second price and if the corresponding current exchange rate is worse than the requested trade price, refusing the trade; and

See above. See also Claim 1(iv-v).

(v) transmitting from the trading system server to the trading client system an indication of whether the trade was refused or transacted and, if transacted, an indication of the price the trade was transacted at.

See above. See also Claim 1(v-vii).



Time	News Title	Category
2020-05-06 12:02:30 PM	Italy's daily coronavirus death toll and new cases' tally both rise	TOP NEWS*-Foreign Exchange
2020-05-06 12:02:23 PM	*TOP NEWS*-Central Banks & Global Economy	
2020-05-06 12:02:21 PM	*TOP NEWS*-Global Markets	
2020-05-06 12:00:32 PM	*TOP NEWS*-World News	
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2020-05-06 11:57:47 AM	UPDATE 1-Natixis swings to a loss, hikes provisions on coronavirus, frauds	
2020-05-06 11:55:51 AM	BUZZ-COMMENT-Yen gains counter upbeat risk, AUD/USD rally struggles	
2020-05-06 11:55:43 AM	WRAPUP 2-U.S. private navrolls dive by a record 20.2 million	

News Economic Calendar

New trade: Market AUD/USD, BUY, 0.64149, Quantity 2,000, Order ID [REDACTED]